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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/551,816	04/18/2000	Raul Bruzzone	PHF 99,598	2671

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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BRIARCLIFF MANOR, NY 10510

EXAMINER

RICHEY, JAMES J

ART UNIT	PAPER NUMBER
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2663

DATE MAILED: 09/11/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/551,816

Applicant(s)

BRUZZONE, RAUL

Examiner

James J. Richey

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because of extraneous figure information listed below. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Proctor in view of Choate.

Proctor discloses an antenna apparatus used in mobile communications that consists of multiple antenna elements (items 100 and 101-105) (see Figure 2 and col. 6, lines 1-14). Figure 2 also shows transceiver (130) and control processor (140) that are used in the acquisition of data sent between units. Figure 3 discloses the steps taken by control processor (140) and memory

storage therein to measure the signal strength of each phase setting (items 302-305) (col. 8, lines 14-60), the result of which is used to calculate the direction of the base station (col. 9, lines 47-60; and col. 10, lines 55-61). Phase Shifters (111-115), in Figure 2, are used in conjunction with control processor (140) to orient the antenna elements based on the direction found (col. 8, lines 44-54). Figure 3 additionally discloses step 306, which determines the best setting/direction to be used and then controls the antennas accordingly (step 307).

Proctor makes reference to scanning potential sources, but does not specifically state that the invention stores a list of alternate base stations that can become active if the need arises. Figure 4 in Choate discloses an airline communication system that consists of multiple transceivers (121, 121', 121''), as well as processor (138) and memory (143) that are used to control communications between the aircraft and base stations (col. 9, lines 61-68; col. 10, lines 1-21). Figure 18 in Choate discloses the manner in which the invention scans and stores a list of all active base stations in the area of the mobile device (steps 154-172). Figure 19 (steps 195-201) shows the decisional selection process used in choosing the base station and an example of the ranking system and data table can be found in col. 15, lines 8-61.

By combining this rating/storage of all base stations disclosed by Choate with the antenna apparatus mentioned in Proctor, the resulting mobile device would be able to track all the base stations in its vicinity and store information about these base stations. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include such a monitoring/storage system in order to facilitate hand-off between cellular base stations. By including such a system, a mobile device would be able to change the direction of its antenna quickly and thus maintain a high signal strength at all times.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Choate in view of Procter.

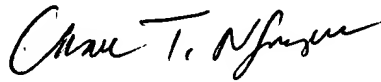
Choate discloses software used in a mobile communication device that utilizes a processor (138) and memory (143). This software, in turn, controls transceivers (121, 121', 121'') which then enables the device to communicate with a myriad of base stations (col. 15, lines 62-68; col. 16, lines 1-16). Furthermore, in addition to handling the call processing, the software, shown in Figure 17, also searches through the available base stations, maintains a list and ranking of these stations, and selects the best available from this list (items 141 and 142). However, while Choate makes multiple reference to orienting its systems to the strongest signal strength it receives, it does not specifically state that the direction of the base stations are calculated nor that this information is stored.

Procter's invention also makes use of a processor and memory, disclosed by item 140, (col. 7, lines 24-47), but uses these to calculate the direction of the base stations and orient its antenna structure so as to maximize signal output. By using the software defined in Choate with the mobile device mentioned in Procter, the result would be a mobile communication device with software that would allow it to store information about number, signal strength, and direction of the base stations around it and orient its antenna structure based on this information. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include this software in Procter's invention so as to seamlessly implement the hardware of the system and facilitate hand-off between cellular base stations. With such a combination, communication signals would be readily processed by the mobile device and interruptions would be minimized.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James J. Richey whose telephone number is (703) 305-4682. The examiner can normally be reached on M-F: 8:30am-6pm, Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T. Nguyen can be reached on (703) 308-5340. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600